

*Sertifikaat*  
PATENTKANTOOR  
REPUBLIC OF SOUTH AFRICA

DEPARTEMENT VAN  
HANDEL EN NYWERHEID



10/505291  
PCT/IB 03/00500  
18/03  
Certificate  
PATENT OFFICE  
REPUBLIEK VAN SUID-AFRIKA

DEPARTMENT OF TRADE  
AND INDUSTRY

19 AUG 2004

Hiermee word gesertifiseer dat  
This is to certify that

REC'D	08 APR 2003
WIPO	PCT

the documents attached hereto are true copies of the Forms P2, P6,  
provisional specification and drawings of South African Patent  
Application No. 2002/1395 in the name of ADCOCK INGRAM LIMITED

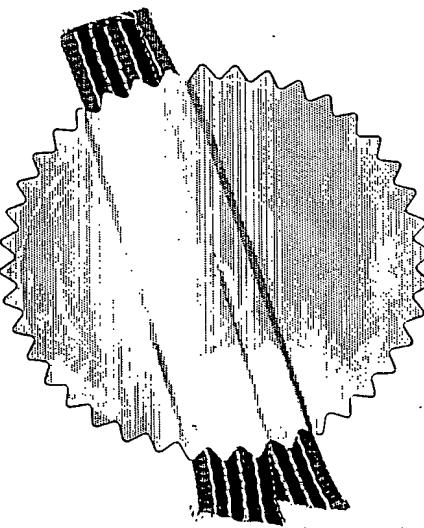
Filed : 19 February 2002  
Entitled : PHARMACEUTICAL  
COMPOSITIONS

**PRIORITY  
DOCUMENT**  
SUBMITTED OR TRANSMITTED IN  
COMPLIANCE WITH RULE 17.1(a) OR (b)

Geleken te  
Signed at PRETORIA in die Republiek van Suid-Afrika, hierdie  
in the Republic of South Africa, this

28th

dag van  
day of February 2003



*18/03/03*  
Registrateur van Patente  
Registrar of Patents

REPUBLIC OF SOUTH AFRICA

## REGISTER OF PATENTS

PATENTS ACT, 1978

OFFICIAL APPLICATION		LODGING DATE: PROVISIONAL		ACCEPTANCE DATE	
21	01	2002/1395	22	19 FEB 2002	47
INTERNATIONAL CLASSIFICATION		LODGING DATE: COMPLETE		GRANTED DATE	
51		23			
FULL NAME(S) OF APPLICANT(S)/PATENTEE(S)					
71	ADCOCK INGRAM LIMITED				
APPLICANTS SUBSTITUTED:					DATE REGISTERED
71					
ASSIGNEE(S)					
71					
FULL NAME(S) OF INVENTOR(S)					
72	TO BE ADVISED				
PRIORITY CLAIMED		COUNTRY		NUMBER	
N.B. Use International abbreviation for country (see Schedule 4)		33	NIL	31	NIL
32		NIL			
TITLE OF INVENTION					
54	PHARMACEUTICAL COMPOSITIONS				
ADDRESS OF APPLICANT(S)/PATENTEE(S)					
17 HARRISON AVENUE, BRYANSTON, GAUTENG, SOUTH AFRICA					
ADDRESS FOR SERVICE		S & F REF			
74	SPOOR & FISHER, SANDTON			PA132630/P	
PATENT OF ADDITION NO.		DATE OF ANY CHANGE			
61					
FRESH APPLICATION BASED ON		DATE OF ANY CHANGE			

The granting of a patent is hereby requested by the undermentioned applicant on the basis of the present application filed in duplicate.

**OFFICIAL APPLICATION NO.**

21 01 1995

PA132630/P

**FULL NAME(S) OF APPLICANT(S)**

71 ADCOCK INGRAM LIMITED

**ADDRESS(ES) OF APPLICANT(S)**

17 HARRISON AVENUE, BRYANSTON, GAUTENG, SOUTH AFRICA

**TITLE OF INVENTION**

54 PHARMACEUTICAL COMPOSITIONS

THE APPLICANT CLAIMS PRIORITY AS SET OUT ON THE ACCOMPANYING FORM P.2. THE EARLIEST PRIORITY CLAIM IS:

COUNTRY: NIL NUMBER: NIL DATE: NIL

~~THIS APPLICATION IS FOR A PATENT OF ADDITION TO PATENT APPLICATION NO.~~

21 | 01

THIS APPLICATION IS A FRESH APPLICATION IN TERMS OF SECTION 37 AND IS BASED ON APPLICATION NO.

21 01

**THIS APPLICATION IS ACCOMPANIED BY:**

- 1. A single copy of a provisional specification of 5 pages.
- 2. Drawings of sheets
- 3. Publication particulars and abstract (Form P.8 in duplicate).
- 4. A copy of Figure of the drawings (if any) for the abstract.
- 5. Assignment of invention.
- 6. Certified priority document.
- 7. Translation of the priority document.
- 8. Assignment of priority rights.
- 9. A copy of the Form P.2 and the specification of S.A. Patent Application No. .
- 10. Declaration and power of attorney on Form P.3.
- 11. Request for ante-dating on Form P.4.
- 12. Request for classification on Form P.9.
- 13. Form P.2 in duplicate.
- 14. Other.

74 ADDRESS FOR SERVICE: SPOOR & FISHER, SANDTON

Dated: 19 February 2002

**SPOOR & FISHER**  
PATENT ATTORNEYS FOR THE APPLICANT(S)

REPUBLIC OF SOUTH AFRICA  
PATENTS ACT, 1978

## PROVISIONAL SPECIFICATION

(Section 30(1) – Regulation 27)

OFFICIAL APPLICATION NO.

21	01	2002/1395
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LODGING DATE

22	19 FEBRUARY 2002
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FULL NAMES OF APPLICANTS

71	ADCOCK INGRAM LIMITED
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FULL NAMES OF INVENTOR

72	TO BE ADVISED
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TITLE OF INVENTION

54	PHARMACEUTICAL COMPOSITIONS
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### BACKGROUND OF THE INVENTION

This invention relates to pharmaceutical compositions and their use in the symptomatic relief and treatment of pain, with or without fever.

### SUMMARY OF THE INVENTION

According to one aspect of the invention, a pharmaceutical composition comprises a combination of (i) an analgesic, (ii) a selective or specific COX-2 inhibitor, and (iii) an opiate, and a pharmaceutically acceptable carrier.

In a preferred composition of the invention the analgesic (i) is paracetamol or a pharmaceutically acceptable salt or derivative thereof, the selective or specific COX-2 inhibitor (ii) is selected from the group comprising meloxicam, celecoxib, rofecoxib and pharmaceutically acceptable salts or derivatives thereof, and the opiate (iii) is selected from the group

comprising codeine, morphine, tramadol, fentanyl and pharmaceutically acceptable salts or derivatives thereof.

A particularly preferred composition of the invention comprises a combination of paracetamol, meloxicam and codeine phosphate.

The invention extends to the use of a pharmaceutical composition as defined above in a method of providing symptomatic relief or treatment of pain, with or without fever, in particular that associated with inflammation such as that associated with trauma, osteoarthritis or rheumatoid arthritis, for example.

The invention also extends to the use of a combination of (i), (ii) and (iii) in the manufacture of a medicament for use in the symptomatic relief or treatment of pain, with or without fever.

#### **DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS**

The pharmaceutical compositions of the invention are suitable for the symptomatic relief or treatment of pain with or without fever, in particular but not limited to that associated with inflammatory processes, such as trauma, osteoarthritis or rheumatoid arthritis, for example.

The first ingredient is an analgesic such as paracetamol (acetaminophen) or a pharmaceutically acceptable salt or derivative thereof. It has analgesic and antipyretic properties but limited or no anti-inflammatory action.

The daily dose of the paracetamol active ingredient is typically in the range of about 60 mg (children) to about 4000 mg (adults).

The second ingredient is a selective or specific COX-2 inhibitor such as meloxicam, celecoxib and rofecoxib, for example. These agents have anti-inflammatory and analgesic properties. Their ability to inhibit the action of COX-2 and not COX-1 has been shown to provide an enhanced safety profile for these compounds when compared to non-specific COX inhibitors.

In the case of meloxicam as active ingredient, the daily dose is typically in the range of about 3.75 mg to about 30 mg, preferably about 7.5 mg to about 15 mg.

The third ingredient is an opiate such as codeine, morphine, tramadol or fentanyl, for example. These compounds bind with specific receptors at many sites within the central nervous system to alter processes affecting both the perception of pain and the emotional response to pain.

The daily dose of the opiate, in the case of codeine phosphate, is 10 mg to 360 mg.

A pharmaceutical composition comprising a combination of an analgesic, an opiate and a selective or specific COX-2 inhibitor includes a pharmaceutically acceptable carrier and may include other necessary non-active excipients such as, for example, sorbitol, sucrose, saccharin, starch, lactose, guar gum, xanthan gum, magnesium stearate, bees wax, talc, methylcellulose, dextrin or povidone. The pharmaceutical composition may be provided in any appropriate dosage form such as, for example, tablets, capsules, granules, suspensions, solutions or other liquid forms, and is intended for oral, rectal or intravenous administration.

The dosage form will typically be administered to a patient from 2 to 4 times per day.

Although the active ingredients would typically be administered at currently accepted therapeutic doses, it is envisaged that one or more actives could be administered at lower than currently recognized doses while still providing effective pain relief/treatment.

DATED THIS 19<sup>th</sup> DAY OF FEBRUARY 2002



SPOOR & FISHER  
APPLICANT'S PATENT ATTORNEYS